AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Please replace paragraph 0010 with the following:

--[0010] A more complete understanding of the present invention will become apparent from the following description taken in conjunction with the accompanying drawings, wherein:

FIG. 1 is a schematic illustration of a conventional soft-start system;

FIG. ~~2A~~ 2 is a schematic illustration of a soft-start system in accordance with one aspect of the invention;

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FIG. 2A is a schematic illustration of a soft-start system in which the switching device includes a Bipolar Junction Transistor (BJT) in accordance with an exemplary embodiment of the present invention;

FIG. 2B is an illustration of a hysteresis control of the switching device;

FIG. 3 is a schematic illustration of a soft-start system in accordance with another aspect of the invention; and

FIG. 4 is an illustration of test results of a soft-start system in accordance with the invention.--

Please replace paragraph 0012 with the following paragraph:

--[0012] FIG. ~~2A~~ 2 shows a soft-start system according to one embodiment of the present invention. The soft-start system for electrical power systems comprises a rectifier 260 that receives AC power from a source 250 and converts the AC power into DC power in a DC link 280. DC link 280 is used to supply a power device such as inverter 270. A capacitor 230 or capacitor bank 230 of one or more capacitors is connected to a first bus 282 of the DC link 280. A resistor 210, or a resistor bank 210 of one or more resistors, is connected a second

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bus 284 of the DC link 280. For purposes of convenience, the term "resistor 210" (designated with the label "R" in the drawings) will be used to refer to either a single resistor 210 or a resistor bank 210 including one or more resistors. The resistor 210 and capacitor bank 230 are connected in series. A switching device 220 is connected in parallel with the resistor 210 and a triggering circuit 240 for measuring a DC voltage on the DC link 280 and activating the switching device 220 to short circuit the resistor 210.--

Please replace paragraph 0015 with the following paragraph:

--[0015] Those skilled in the art will appreciate that many alternative components and configurations can be used to achieve the above design. For example, the switching device ~~210~~ 220 can be an Insulated Gate Bipolar Transistor (IGBT). However, any appropriate switching device, either electromechanical or solid state, can be used, such as a Bipolar Junction Transistor (BJT), Field Effect Transistor (FET), Metal Oxide Semiconductor FET (MOSFET), Silicon Controlled Rectifier (SCR), diode, hybrid device, and the like. For instance, FIG. 2A illustrates an exemplary embodiment where the switching device 220 is a BJT.--

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Please replace paragraph 0016 with the following paragraph:

--[0016] Further, those skilled in the art will appreciate that other combinations of devices can be added or altered without departing from the scope of the present invention. For example, a ~~free wheeling~~ blocking diode 225 can be added to the switch device 220 (as shown in FIG. 2A) or integrated into the switch device as part of a hybrid device. Other protection devices such as snubbers and the like could also be used as is well known in the art. The resistor 210 could be formed from several resistors, such as in a resistor bank. The resistor 210 can be made from any suitable material, such as metal, ceramic, carbon, semiconductor and combinations of these materials, as is known in the art. Similarly, the

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capacitor can be in the form of a capacitor bank and likewise can be formed from any suitable material know in the art.--

Please replace paragraph [0018] with the following paragraph:

--[0018] Referring to Fig. 3, the rectifier can be formed of six co-packaged IGBTs as is well known in the art. Therefore, the rectifier configuration is not shown and will not be described further. The switching device 320 is a seventh IGBT. The rectifier and the switching device 320 can be contained in a single package 360. For example, the IGBTs of the rectifier and the switching device 320 can be contained in an Intelligent Power Module (IPM) 360, as shown. IPMs offer a low-cost integrated solution for power systems. The IPM 360 can comprise a three-phase IGBT bridge and IGBT switching device 320 along with the associated free wheeling diodes, such as diode 322, ~~324,~~ driving circuits for driving the IGBTs, a blocking diode ~~322~~ (not shown) and external interface devices for coupling to the triggering circuit 240. The addition of all the necessary support and interface devices into one package along with the power IGBTs greatly reduces design and manufacturing cost and complexity. Additionally, the physical envelope required for the system is also reduced due to the integration of the components, which can be very advantageous especially for size restrictive environments such as electrical systems used in aerospace hardware. Those skilled in the art will appreciate that many other integrated combinations can be used. For example, the rectifier could be formed of a conventional diode bridge integrated with a switching device 320, such as an IGBT, SCR, MOSFET, and the like.--

AMENDMENTS TO THE DRAWINGS

Attached hereto are two (2) sheets of proposed drawing corrections and one (1) sheet of a proposed new drawing. In Figs. 1 and 3, the symbols illustrating the switching devices 120 and 320, respectively, have been replaced with labeled rectangular boxes. Also, in Fig. 3, diode 324 has been removed. Fig. 2 has been added. Formal drawing sheets will be filed in response to the Examiner's approval of these drawing corrections.

Attachment: (2) Sheets of Proposed Drawing Corrections
(1) Sheet of Proposed New Drawings